

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



550642



(43) International Publication Date
14 October 2004 (14.10.2004)

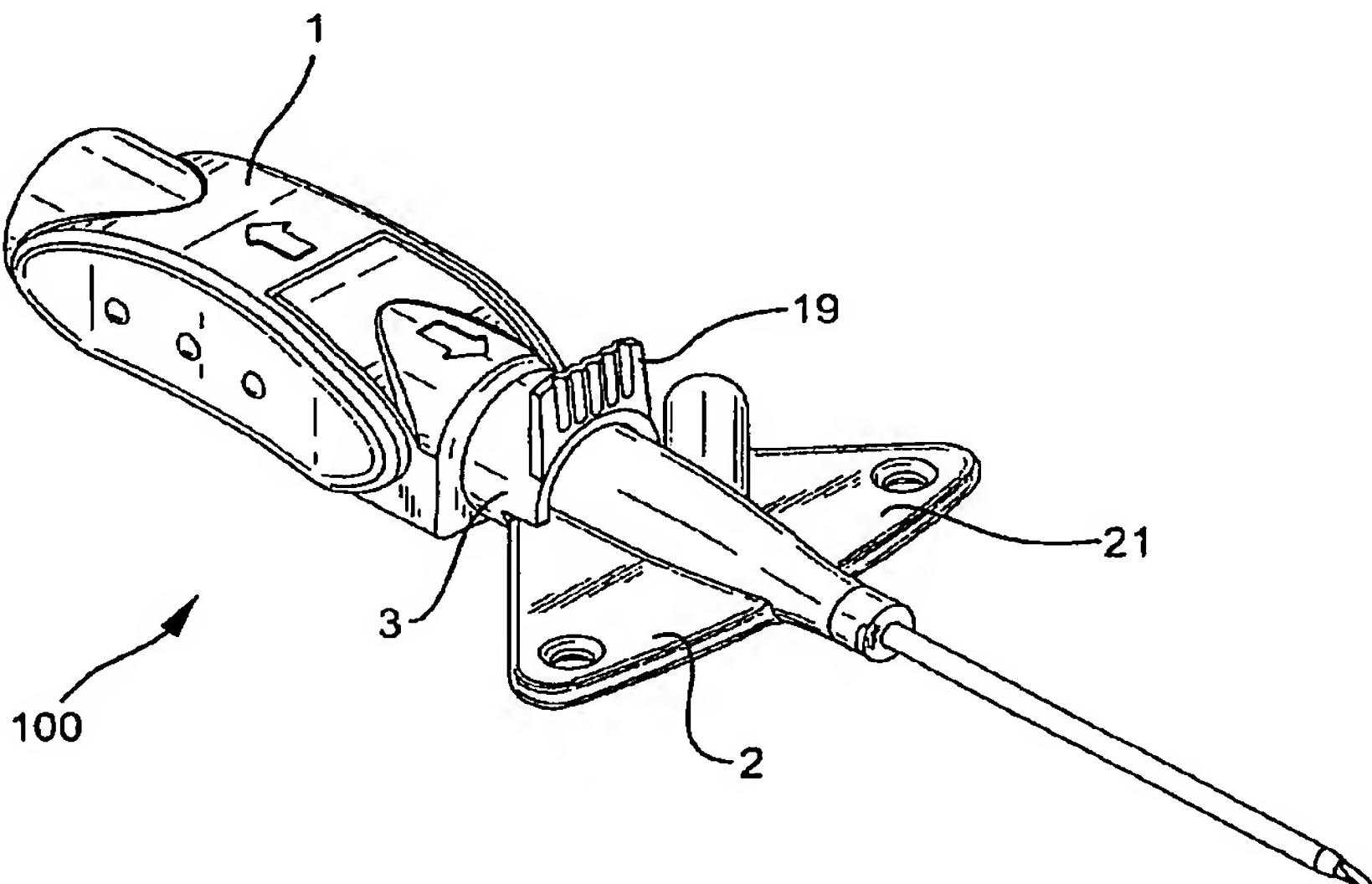
PCT

(10) International Publication Number
WO 2004/087247 A2

- (51) International Patent Classification⁷: **A61M 25/00**
- (21) International Application Number:
PCT/US2004/008899
- (22) International Filing Date: 24 March 2004 (24.03.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/457,345 25 March 2003 (25.03.2003) US
- (71) Applicant (*for all designated States except US*): BECTON, DICKINSON AND COMPANY [US/US]; 1 Becton Drive, Franklin Lakes, NJ 07417-1880 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): MOULTON, William, G. [US/US]; 3026 West 7050 South, West Jordan, UT 84084 (US).
- (74) Agent: MURTHA, James, J.; Becton, Dickinson and Company, 1 Becton Drive, Franklin Lakes, NJ 07417-1880 (US).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: IV CATHETER AND NEEDLE ASSEMBLY AND METHOD



WO 2004/087247 A2

(57) Abstract: An IV catheter includes a catheter having a wall defining a lumen, a proximal end, and a distal end. An adapter has a proximal end, a distal end and an internal cavity. The adapter is in fluid communication with the catheter lumen. A septum is positioned within the adapter cavity at the adapter proximal end. An extension tube extends laterally from the adapter and is in fluid communication with adapter cavity. A tip shield has a distal end, a proximal end and an internal cavity. The tip shield is positioned adjacent adapter proximal end and coaxially aligned with adapter. A hub has a proximal portion, a distal portion and an internal cavity. The hub is positioned adjacent the tip shield proximal end and is aligned coaxially with the tip shield. A cannula has a wall defining a lumen, a beveled distal end, an aperture in the wall of said cannula near the cannula distal end and a proximal end in the shape of a hook. The cannula passes through and is coaxially aligned with the catheter, adapter, tip shield and hub.



Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.